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L14-86(02-05)-L

ILLINOIS POWER COMPANY



CLINTON POWER STATION, P.O. BOX 678, CLINTON, ILLINOIS 61727

February 5, 1986

Docket No. 50-461

Mr. James G. Keppler
Regional Administrator
Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Subject: Reportable 10CFR50.55(e) Deficiency 55-85-10:
Electric Conductor Seal Assemblies (ECSAs);
Broken Neck Seals and Hollow Screws on Installed
Rosemount Transmitters

Dear Mr. Keppler:

On November 20, 1985 Illinois Power Company verbally notified Mr. R. Lerch, U.S. NRC Region III (Ref. IP Record of Coordination Y-32509, November 20, 1985) of a potentially reportable condition under the provisions of 10CFR50.55(e) concerning the incorrect installation of ECSAs, broken Rosemount Transmitter neck seals and damaged Rosemount Transmitter termination screws. This initial notification was followed by one (1) interim report (Ref. IP Letter U-600387, D. P. Hall to J. G. Keppler dated January 2, 1986). Illinois Power has reviewed and evaluated the findings associated with this investigation and has determined that an extensive engineering evaluation would be required to determine the effect of these deficiencies on the associated systems to perform their required safety function if uncorrected. On this basis the issue is considered to be reportable under the provisions of 10CFR50.55(e).

Our investigation of this issue is complete. This letter represents a final report in accordance with the requirements of 10CFR50.55(e). Attachment A provides the details of our investigation.

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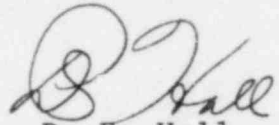
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We trust that this final report provides you sufficient background information to perform a general assessment of this reportable deficiency and adequately describes our overall approach to resolve this issue.

Sincerely yours,


D. P. Hall
Vice President

RLC/ckc

Attachment

cc: NRC Resident Office
Director, Office of I&E, US NRC, Washington, DC 20555
Illinois Department of Nuclear Safety
INPO Records Center

ATTACHMENT A

Illinois Power Company
Clinton Power Station

Docket No. 50-461

Reportable 10CFR50.55(e) Deficiency 55-85-10
Electric Conductor Seal Assemblies (ECSAs);
Broken Neck Seals and Hollow Screws
on Installed Rosemount Transmitters

Final Report

Statement of Reportable Deficiency/Background

Illinois Power Start-up (IPSU) identified deficiencies associated with installed Electric Conductor Seal Assemblies (ECSAs) and Rosemount transmitters on Condition Report (CR) No. 1-85-10-054 and Nonconforming Material Reports (NCMRs) Nos. 1-1928 and 1-1929. NCMR-1-1928 identified broken Rosemount transmitter neck seals and possible damaged hollow terminal screws on installed Rosemount transmitters. NCMR-1-1929 identifies the following deficiencies involving ECSAs:

- ° ECSAs installed backwards.
- ° Incorrect use of Grafoil tape on Midlock Cap threads.
- ° ECSA not connected directly to primary device.
- ° No gap or excessive gap between Midlock Cap and seal body.

Investigation Results/Corrective Action

The backwards installation of ECSAs has been addressed and resolved previously. Corrective Action Request (CAR) 262, NCR 34479, NCR 34678 and NCR 35329 document this investigation and resolution.

The use of intermediate conduit fittings between ECSA and primary device was reviewed and verified to be an acceptable design as shown on drawings E05-1200, Sheet 21 and 21A.

On November 14, 1985, CAR-267 was initiated to investigate the incorrect installation of ECSAs. The Corrective Action Plan for CAR-267 calls for inspection/rework (as necessary) of ECSAs. NCMR 1-1928 required that all Rosemount transmitters with an attached ECSA be inspected for a broken neck seal and hollow terminal screw damage. A total of 579 ECSAs were inspected. As a result of our inspection, 30 ECSAs were found with incorrect use of grafoil tape, 7 ECSAs were found with improper gap, and 28 Rosemount transmitters were found with broken neck seals. No damaged hollow screws were found.

ATTACHMENT A
(continued)

Construction Work Requests (CWRs) and Plant Construction Work Request (PCWRs) were written and worked in accordance with the instructions provided by the Corrective Action Plan for CAR-267 and the dispositions of NCMR 1-1928 and NCMR 1-1929. It is anticipated that all corrective actions associated with this investigation will be completed by February 10, 1986.

Root Cause

Our investigation has determined that the root cause associated with the deficient ECSAs was a lack of adherence to Conax Instruction Manual IPS-725 by Baldwin Associates' Craft and QC personnel. Baldwin Associates' Craft and QC personnel involved with the installation and inspection of ECSAs have been retrained.

Investigation of the broken neck seals on Rosemount transmitters determined the root cause to be damage which resulted from construction related activities. Illinois Power Nuclear Station Engineering Department (NSED) issued written notification (letter Y-79142) to Clinton Power Station (CPS) Managers informing them of this deficiency, and stressed the need for site personnel to exercise caution when working in close proximity to the Rosemount Transmitters and other instruments which could sustain damage from construction related activities.

Surveillance and maintenance procedures are used to ensure equipment and instruments maintain operability and configuration. Deficiencies found will be reworked in accordance with maintenance procedures.

Safety Implications/Significance

The incorrect use of Grafoil tape and the incorrect gap on ECSAs invalidate the ECSA qualification. The broken neck seals on Rosemount transmitters invalidate the Rosemount transmitter qualification. An extensive engineering evaluation would be required to determine the effect of these deficiencies on the associated systems to perform their required safety function if uncorrected. On this basis the issue is considered to be reportable under the provisions of 10CFR50.55(e).